Chapter 6

6. HISTORY OF NATURAL RESOURCE MANAGEMENT

Since 1961, when Fort Wainwright was returned to Army control, natural resource management has become increasingly important. Early efforts involved continuing programs initiated by the Air Force. These were conducted by Conservation NCO without a trained staff. By 1970, when the first natural resources professional was hired, the installation had developed two natural resource plans (U.S. Army, 1970). At least four succeeding plans have been developed since then.

6-1 Forest Management

USARAK has not completed a forest management plan for Fort Wainwright. A draft forest management plan (Fort Wainwright, 1993) is the basis for forest management practices specified in this INRMP. Forest management on Fort Wainwright has emphasized wildlife habitat improvement rather than commercial timber objectives. The only commer-

cial forest product programs on Fort Wainwright are Christmas trees and firewood, which were first sold in 1994. They were offered free prior to that time.

Eielson AFB developed its first forest management plan for 1983-1988. This plan has twice been revised, the latest for 1993-1998 (Von Rueden, 1983; 1993). These plans have information that is useful for portions of Fort Wainwright. The 1993-98 plan outlined the following long-range goals:

- Establish a 70-year rotation for hardwoods
- Establish a 130-year rotation age for softwoods with a provision to delay harvest until 200 years in specific cases
- Provide Christmas trees for base personnel
- Harvest forest products from future construction and other development sites

6-2 Fish and Wildlife Management

Early fish and wildlife management on Fort Wainwright included a variety of programs (U.S. Army, 1970). The ADF&G was involved from the beginning, conducting a moose tagging project on what was then known as the Fort Wainwright Bombing Range. An early proposal also called for tagging furbearers on YTA to determine their movements and populations.

In the early 1970s, one project developed shorelines of small ponds and lakes to encourage waterfowl nesting, feeding, and resting. Project areas were closed to hunting with the objective of increasing viewing opportunities for area bird watchers, Scout groups, and school children. A bird checklist for Fort Wainwright was also started at this time.

Pre-1970 fisheries management included eight projects as listed below:

- Determine the feasibility of stocking rainbow trout in the power plant cooling pond
- Improve the fishery at McNair Woods Gravel Pit; ADF&G stocked 25,000 grayling in 1970; the fisheries plan called for removal of northern pike from the pond and construction of brush piles to protect grayling
- Measure chemical and physical characteristics of lakes and ponds to determine stocking suitability
- Survey fisheries and compile a list of waters available, species of fish, methods of fishing, and access to them
- Cooperative projects with ADF&G, which involved stocking of ponds and lakes on post, loans of Army equipment, assistance in rehabilitating lakes off-post, and construction of roads and trails to lakes
- Collect/create educational materials for the Natural Resource Center, including mounted fish specimens, picture and slide libraries, and model lakes and streams
- Create an ox-bow lake in the Chena River channel
- Investigate the feasibility of cold water fertilization to increase fish productivity

In 1978, natural resources specialists from the three Alaska Command installations collaborated to draft a *Natural Resources Conservation Program* (Quirk, Gossweiler, and Kiker, 1978). The first natural resources management plan specifically for Fort Wainwright was completed in 1981 (U.S. Army, 1981). At that time, the Fort Wainwright program did not have an installation-specific cooperative plan, and was still operating under the cooperative agreement between the 172nd Infantry Brigade, USFWS, and ADF&G.

In the 1980s, the major natural resources challenge for the installation was management of moose. In the early 1960s, the moose population of Game Management Unit 20A was estimated at 20,000. It was thought that this high population was due to predator control management methods during the 1950s. A decline in that population began in the late 1960s, leading to an estimated 3,000 moose in 1975 (Gaseway et al. 1983). In 1998, the moose population in GMU 20A was estimated at 11,000.

Fort Wainwright initiated more stringent wildlife harvest reporting requirements during 1975-76 due to increased furbearer trapping pressure on Fort

Wainwright. These were continued in the 1980s. Fort Wainwright anticipated that some manner of regulating the number of trappers would be necessary in the future. USARAK also anticipated that Fort Wainwright personnel would become more involved in wildlife censusing.

As a result of studies conducted during the 1970s, it was concluded that very few of the lakes on the installation had the capability to over-winter fish. While the Chena River offered some fishing opportunities, it was considered inferior to the fishing upstream due to increased water turbidity by the time it reached Fort Wainwright.

In 1988, Fort Wainwright and ADF&G began a cooperative study of black bear demographics (Hechtel, 1991). Between 1988 and 1991, 45 individual bears were captured and studied. Overall harvest was judged to be sustainable, although areas on YTA may have localized over-harvest. No serious black bear conservation problems were identified related to Fort Wainwright land management practices.

By the early 1990s, the impact of off-road recreational vehicles, especially airboats, on floating-mat wetland of the Tanana Flats emerged as the most significant problem for natural resources management on Fort Wainwright. A series of intensive evaluations (Racine et al., 1990; Racine and Walters, 1991 and 1994) followed and are ongoing.

The initial fish and wildlife management plan for Eielson AFB was written in 1975. The plan was revised in 1976, 1981, 1984, 1989, and 1994 (Von Rueden, 1989; Von Rueden and Bruce, 1994). These plans contain useful information for management of Fort Wainwright fish and wildlife resources.

6-3 Land Management

Cantonment Area Landscaping

The Fort Wainwright cantonment area was established in 1939, on a floodplain adjacent to the Chena River. Initial clearing for Ladd Field cantonment area, as it was then called, created vast areas of barren land that have never been substantially replanted. Most surface soil was lost during construction, but gravel fill and lawns have been established in nearly all areas where tree and shrub planting is appropriate.

Most mature native trees were removed during construction. Early landscape plantings were done in 1956-58 in the main headquarters, housing, and barracks areas. A large number of shrubs were planted in the headquarters area and on the Gaffney Road entrance in 1963. Planting efforts occurred during the 1970s through the late 1980s with varying degrees of success. Crabapple and cherry trees were planted in housing areas in 1989. In 1989, a large number of white spruces were planted along Gaffney Road. Most died due to their origin (south central Alaska) and improper planting techniques. Any remaining were removed by 1992.

Agricultural Programs

Fort Wainwright has no agricultural leases. Poor soils, high water tables, steep slopes, a short growing season, and incompatibility with the military mission preclude the use of any Fort Wainwright land for standard types of agriculture.

Other Land Management

Since 1981, land management plans have been included as part of Fort Wainwright's natural resources management plans (U.S. Army, 1981). The Proposed Resource Management Plan/Final Environmental Impact Statement was written to fulfill the mandate of the Military Lands Withdrawals Act of 1986. The document was the result of work by a joint BLM-USARAK planning team that consulted with the public throughout the process. The plan acknowledges the primary military purpose of the withdrawn lands, yet it presents a Proposed Plan for a variety of non-military uses. This INRMP uses the 1994 *Fort Wainwright Proposed Resource Management Plan/Final Environmental Impact Statement* as a base on which the management activities and plans are built on.

In 1996, USARAK initiated ITAM on Fort Wainwright. The ITAM program is centrally coordinated for USARAK, using assistance by representatives of both Natural Resources and Range Control at Fort Wainwright. The Land Condition-Trend Analysis (LCTA) program was implemented in 1996. Geo-

graphic Information System (GIS) database development began the same year. Section 10-2 describes the general ITAM program. Individual ITAM components are discussed in Chapters 12, 13, and 14.

6-4 1994 Fort Wainwright Proposed Resource Management Plan–Final Environmental Impact Statement

The Proposed Resource Management Plan/Final Environmental Impact Statement was written to fulfill the mandate of the Military Lands Withdrawals Act of 1986. The document was the result of work by a joint BLM-USARAK planning team that consulted with the public throughout the process. The plan proposes a variety of non-military uses, recognizing the primary military purpose of the withdrawn lands. This INRMP uses the *1994 Fort Wainwright Proposed Resource Management Plan/Final Environmental Impact Statement* as a base on which proposed management activities are built upon.